VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 1-32 have been cancelled.

The following claims have been added:

33. A process of preparing loaded platelets comprising:

providing platelets selected from a mammalian species; and

loading an oligosaccharide into the platelets at a temperature greater than about 25°C to produce loaded platelets.

34. The process of Claim 33 wherein said loading comprises loading with an oligosaccharide solution.

35. The process of Claim 34 wherein said loading comprises uptaking external oligosaccharide via fluid phase endocytosis from the oligosaccharide solution at the temperature greater than about 25°C.

36. The process of Claim 34 wherein said loading comprises incubating the platelets at the temperature greater than about 25°C with the oligosaccharide solution.

37. The process of Claim 33 wherein said loading is without a fixative.

38. The process of Claim 33 wherein said oligosaccharide is trehalose.

39. The process of Claim 33 wherein said loading of the oligosaccharide into the platelets is at a temperature ranging from greater than about 25°C to less than about 40°C.

40. The process of Claim 39 wherein said temperature ranges from about 30°C to less than about 40°C.

41. The process of Claim 39 wherein said temperature is about 37°C.

42. The process of Claim 33 wherein said platelets are human platelets.

43. Loaded platelets produced in accordance with the process of Claim 33.

44. A solution for loading platelets comprising platelets selected from a mammalian species; and an oligosaccharide solution containing the platelets and a temperature greater than about 25°C for loading oligosaccharide from the oligosaccharide solution into the platelets.

45. The solution of Claim 44 wherein external oligosaccharide is uptaked via fluid phase endocytosis from the oligosaccharide solution at the temperature greater than about 25°C.

46. The solution of Claim 44 wherein said solution does not include a fixative.

47. The solution of Claim 44 wherein said oligosaccharide is trehalose.

48. The solution of Claim 44 wherein said temperature of said oligosaccharide ranges from a temperature greater than about 25°C to a temperature less than about 40°C.

49. The solution of Claim 48 wherein said temperature ranges from about 30°C to less than about 40°C.

50. The solution of Claim 49 wherein said temperature is about 37°C.

51. The solution of Claim 44 wherein said platelets are human platelets.

52. The solution of Claim 49 wherein said platelets are human platelets.

53. A process for increasing the loading efficiency of trehalose into platelets comprising:

providing platelets having a first phase transition temperature range and a second phase transition temperature range which is greater than the first phase transition temperature range;

disposing the platelets into a trehalose solution for loading trehalose into the platelets; and

heating the trehalose solution to the second phase transition temperature range to increase the loading efficiency of trehalose into the platelets.

54. The process of Claim 53 additionally comprising uptaking external trehalose via fluid phase endocytosis from the trehalose solution.

55. The process of Claim 53 wherein said platelets are human platelets.

56. The process of Claim 53 wherein said second phase transition temperature range is greater than about 25°C.

57. The process of Claim 55 wherein said second phase transition temperature range is greater than about 25°C.

58. The process of Claim 53 wherein said platelets do not include a fixative.

59. The process of Claim 55 wherein said platelets do not include a fixative.

60. The process of Claim 56 wherein said second phase transition temperature ranges from a temperature greater than about 25°C to a temperature less than about 40°C.

61. The process of Claim 55 wherein said second phase transition temperature ranges from a temperature greater than about 25°C to a temperature less than about 40°C.

62. The process of Claim 60 wherein said temperature ranges from about 30°C to less than about 40°C.

63. The process of Claim 61 wherein said temperature ranges from about 30°C to less than about 40°C.

64. A platelet composition comprising platelets loaded internally with an oligosaccharide from an oligosaccharide solution at a temperature greater than about 25°C.

65. A process for increasing the loading efficiency of a substance into platelets comprising:

providing platelets having a first phase transition temperature range and a second phase transition temperature range which is greater than the first phase transition temperature range;

disposing the platelets into a substance solution for loading a substance into the platelets; and

heating the substance solution to the second phase transition temperature range to increase the loading efficiency of the substance into the platelets.

66. The process of Claim 65 wherein said substance comprises a drug selected from a group of drugs consisting of an anti-thrombic drug, an antibiotic drug, and an anti-mitotic drug.

67. The process of Claim 66 wherein said anti-thrombic drug comprises a tissue plasminogen activator.

68. The process Claim 65 additionally comprising uptaking external substance via fluid phase endocytosis from the substance solution.

69. The process of Claim 65 wherein said platelets are human platelets.

70. The process of Claim 65 wherein said second phase transition temperature range is greater than about 25°C.

71. The process of Claim 65 wherein said platelets do not include a fixative.

72. The process of Claim 70 wherein said second phase transition temperature ranges from a temperature greater than about 25°C to a temperature less than about 40°C.

73. The process of Claim 72 wherein said temperature ranges from about 30°C to less than about 40°C.